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State of Colorado

FATAL TRAFFIC ACCIDENT SUMMARY

1978

State of Colorado

FATAL TRAFFIC ACCIDENT

SUMMARY

1978

Prepared by

THE STATE DEPARTMENT OF HIGHWAYS

DIVISION OF HIGHWAYS - STATE OF COLORADO

STAFF TRAFFIC AND SAFETY PROJECTS BRANCH

STATE DEPARTMENT OF HIGHWAYS

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September 10, 1979

Recipients: Summary of Fatal Traffic Accidents, Calendar Year 1978

This report constitutes a summary of the fatal motor vehicle traffic accidents which occurred on Colorado streets and highways during Calendar Year 1978. We believe the information on the following pages will be of interest and value to all persons concerned about highway safety, and will aid in making others more aware of the seriousness of the highway safety problem.

Yours very truly,

E. N. HAASE
Chief Engineer

By M. E. TUCKER
Staff Traffic &
Safety Projects Engineer

WET/vgh

cc: File

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INTRODUCTION

During Calendar Year 1978 the total number of fatal motor vehicle traffic accidents on Colorado streets and highways decreased 0.6 percent compared with 1977 fatal accidents, while the total number of accidents (fatal, nonfatal injury, and property damage only) which occurred during 1978 increased 10.7 percent over 1977. Pertinent accident statistics for 1978 and 1977 are shown below:

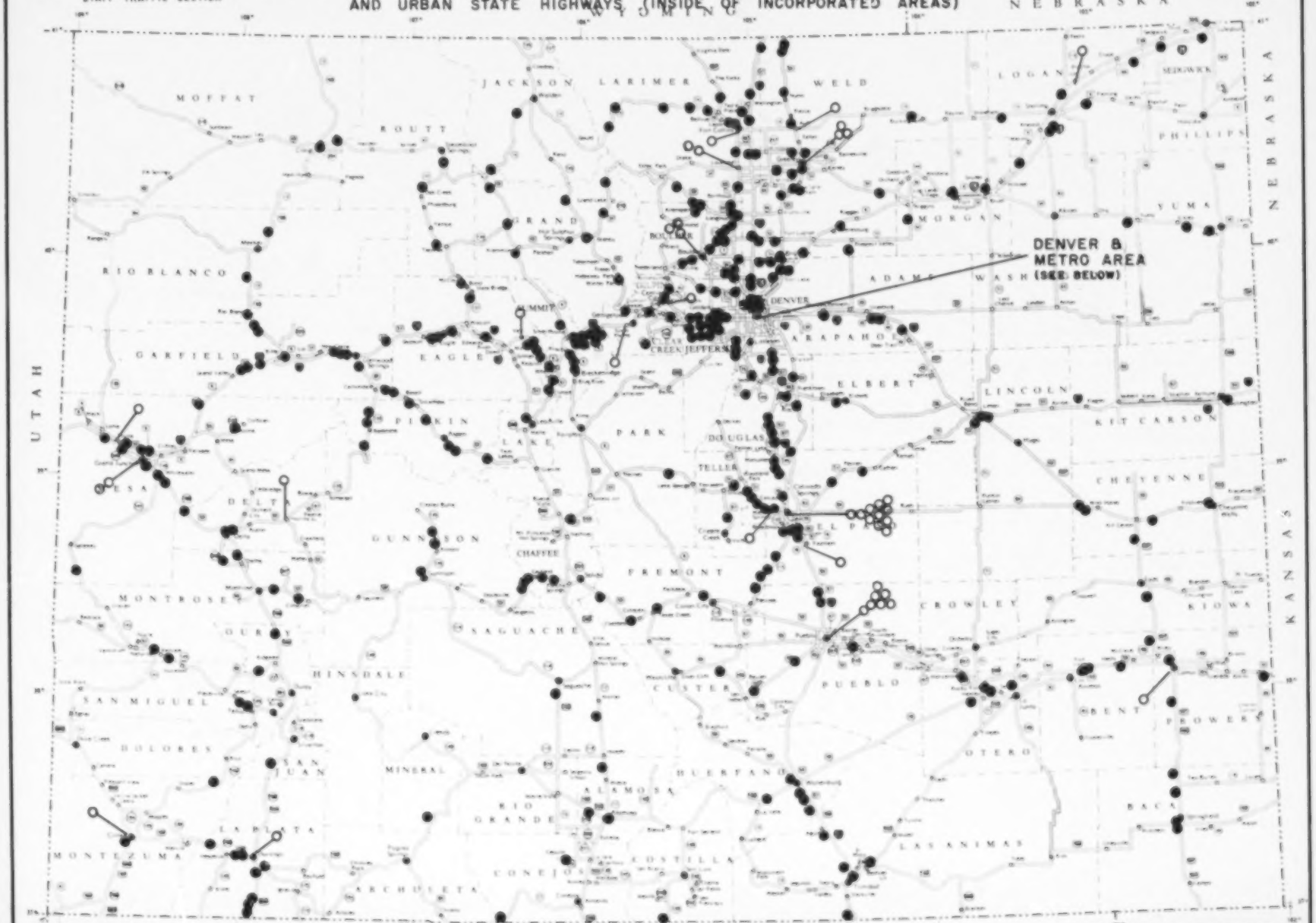
	1978	1977	Percent Change (1977 to 1978)
FATAL ACCIDENTS	616	620	- 0.6%
FATALITIES	713	705	+ 1.1%
NONFATAL INJURY ACCIDENTS	25,042	23,637	+ 5.9%
NONFATAL INJURIES	37,611	35,737	+ 5.2%
TOTAL REPORTED ACCIDENTS	130,810	118,202	+10.7%
ESTIMATED ECONOMIC LOSS	$387,237,100	$366,884,500	+ 5.5%
ANNUAL VEHICLE-MILES OF TRAVEL	19,817,259,000	18,551,220,000	+ 6.8%
FATAL ACCIDENT RATE (fatal accidents per 100 million vehicle-miles of travel)	3.1	3.3	- 6.1%
FATALITY RATE (fatalities per 100 million vehicle-miles of travel)	3.6	3.8	- 5.3%
PERCENT OF TOTAL ACCIDENTS WHICH WERE FATAL ACCIDENTS	0.47%	0.52%	-
PERCENT OF TOTAL ACCIDENTS WHICH PRODUCED NONFATAL INJURIES	19.1%	20.0%	-

STATE DEPARTMENT OF HIGHWAYS
DIVISION OF HIGHWAYS — STATE OF COLORADO
STAFF TRAFFIC SECTION

1978

FATAL TRAFFIC ACCIDENTS ON RURAL STATE HIGHWAYS
(OUTSIDE OF INCORPORATED AREAS)
AND URBAN STATE HIGHWAYS (INSIDE OF INCORPORATED AREAS)

	● RURAL	○ URBAN	TOTAL
FATAL ACCIDENTS	311	102	413
PERSONS KILLED	375	110	485



ARVADA	3	COMMERCE CITY	4	LAKEWOOD	8		
AURORA	3	DENVER	34	LITTLETON	1	WESTMINSTER	1
BROOMFIELD	2	ENGLEWOOD	2	SHERIDAN	1	WHEAT RIDGE	2

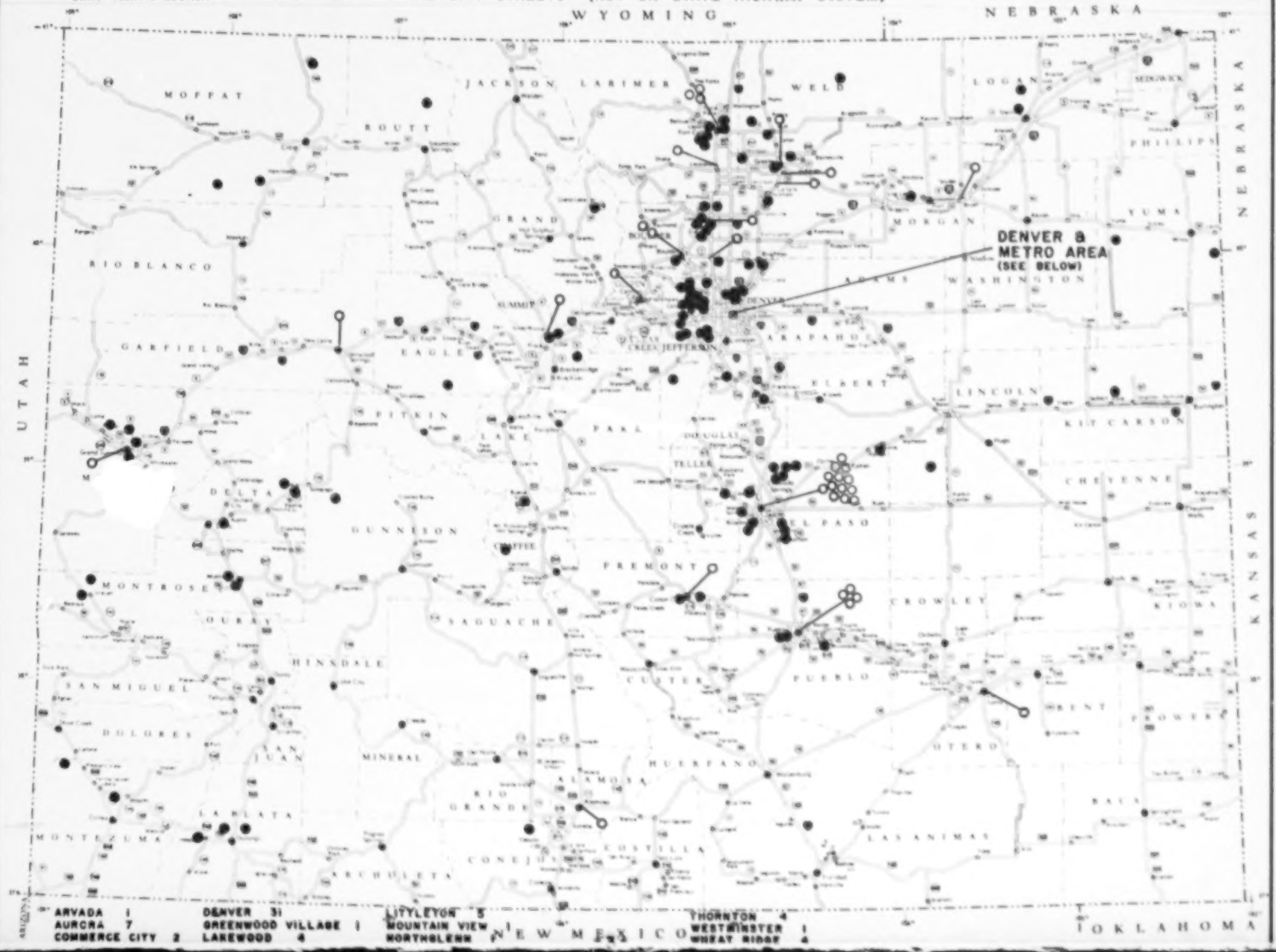
January 1, 1977

STATE DEPARTMENT OF HIGHWAYS
DIVISION OF HIGHWAYS — STATE OF COLORADO
STAFF TRAFFIC SECTION

1978

FATAL TRAFFIC ACCIDENTS ON COUNTY ROADS AND CITY STREETS (NOT ON STATE HIGHWAY SYSTEM)

	● COUNTY RDS	○ CITY STS	TOTAL
FATAL ACCIDENTS	105	98	203
PERSONS KILLED	119	109	228



ARVADA 1	DENVER 31	LITTLETON 5	THORNTON 4		
AURORA 7	GREENWOOD VILLAGE 1	MOUNTAIN VIEW	WESTMINSTER 1		
COMMERCE CITY 2	LAKEWOOD 4	NORTHGLENN	WHEAT RIDGE 4		

FATALITIES AND FATALITY RATES BY YEAR

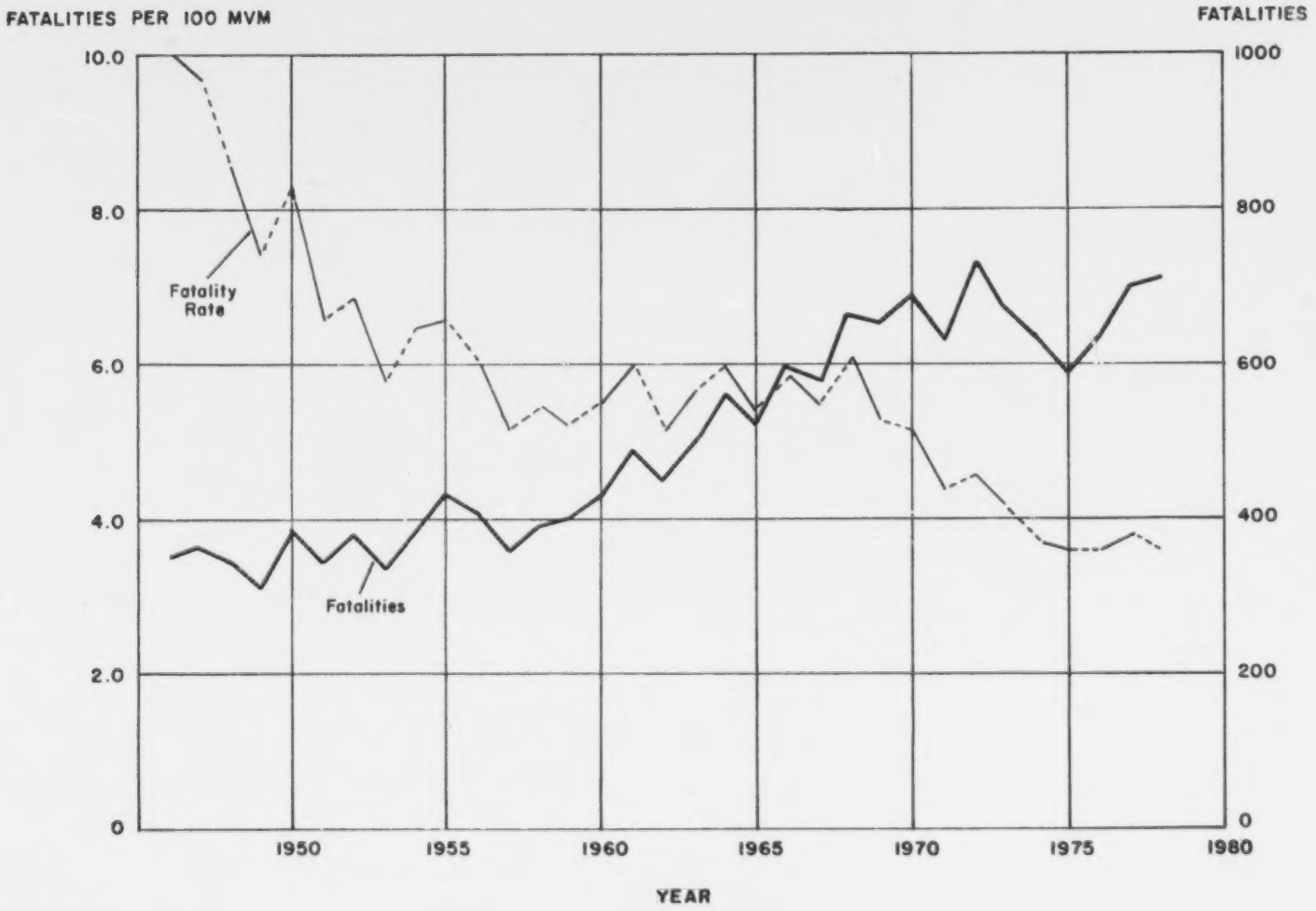
1946 - 1978

Year	Fatalities	Fatality Rate*	Year	Fatalities	Fatality Rate*
1946	357	10.4	1966	600	5.9
1947	369	9.7	1967	587	5.5
1948	344	8.6	1968	669	6.1
1949	317	7.4	1969	659	5.3
1950	386	8.3	1970	688	5.2
1951	344	6.6	1971	635	4.4
1952	382	6.9	1972	737	4.6
1953	337	5.8	1973	674	4.2
1954	388	6.5	1974	615	3.8
1955	429	6.6	1975	591	3.6
1956	409	6.1	1976	634	3.6
1957	367	5.2	1977	705	3.8
1958	396	5.5	1978	713	3.6
1959	404	5.3			
1960	433	5.5			
1961	491	6.0			
1962	451	5.2			
1963	506	5.7			
1964	565	6.0			
1965	527	5.4			

* Fatalities per 100 Million Vehicle-Miles of Travel

FATALITIES AND FATALITY RATES BY YEAR

1946 - 1978



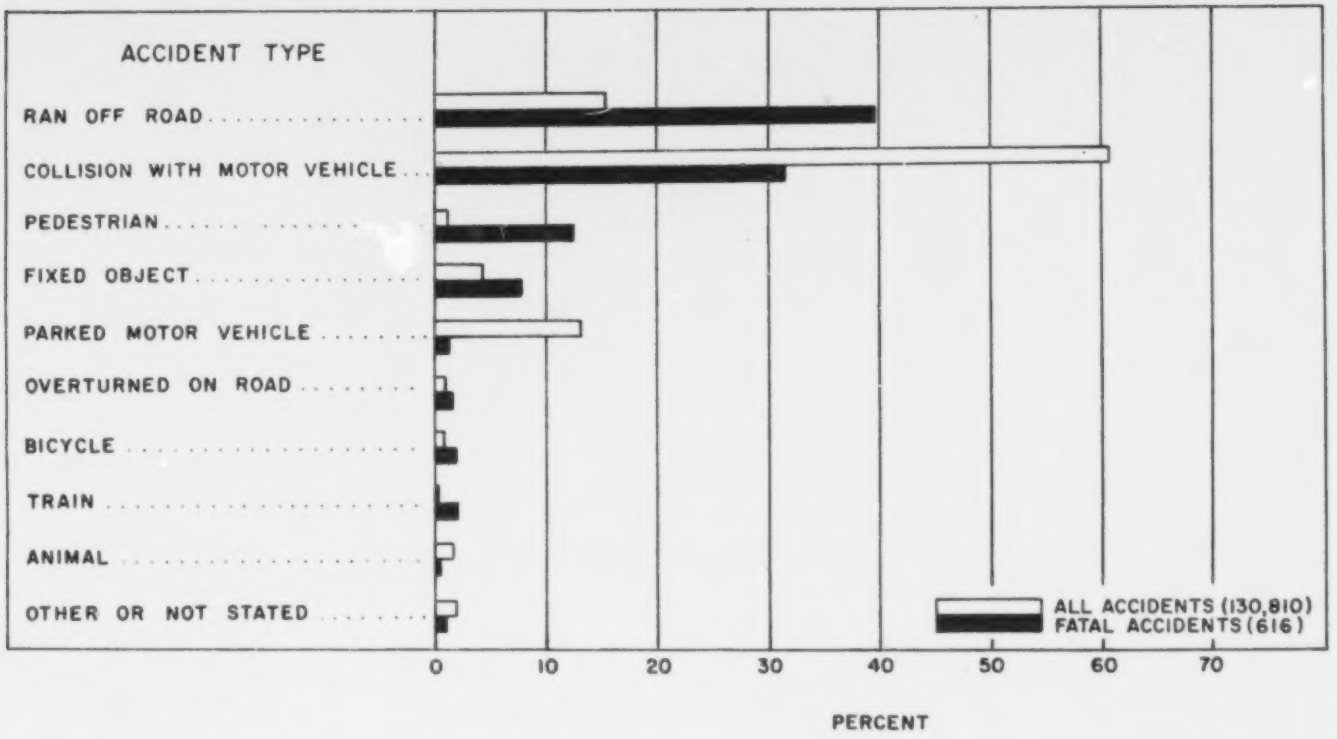
FATAL ACCIDENTS AND FATALITIES BY ACCIDENT TYPE

1978 and 1977

Accident Type	1978		1977	
	Accidents	Fatalities	Accidents	Fatalities
RAN OFF ROAD	245	269	278	309
COLLISION WITH OTHER MOTOR VEHICLE	194	251	184	225
PEDESTRIAN	78	84	76	78
FIXED OBJECT	49	51	35	40
PARKED MOTOR VEHICLE	8	9	8	10
OVERTURNED ON ROAD	9	9	12	13
BICYCLE	11	11	10	10
TRAIN	12	14	11	14
ANIMAL	3	4	1	1
OTHER	7	11	5	5
TOTALS	616	713	620	705

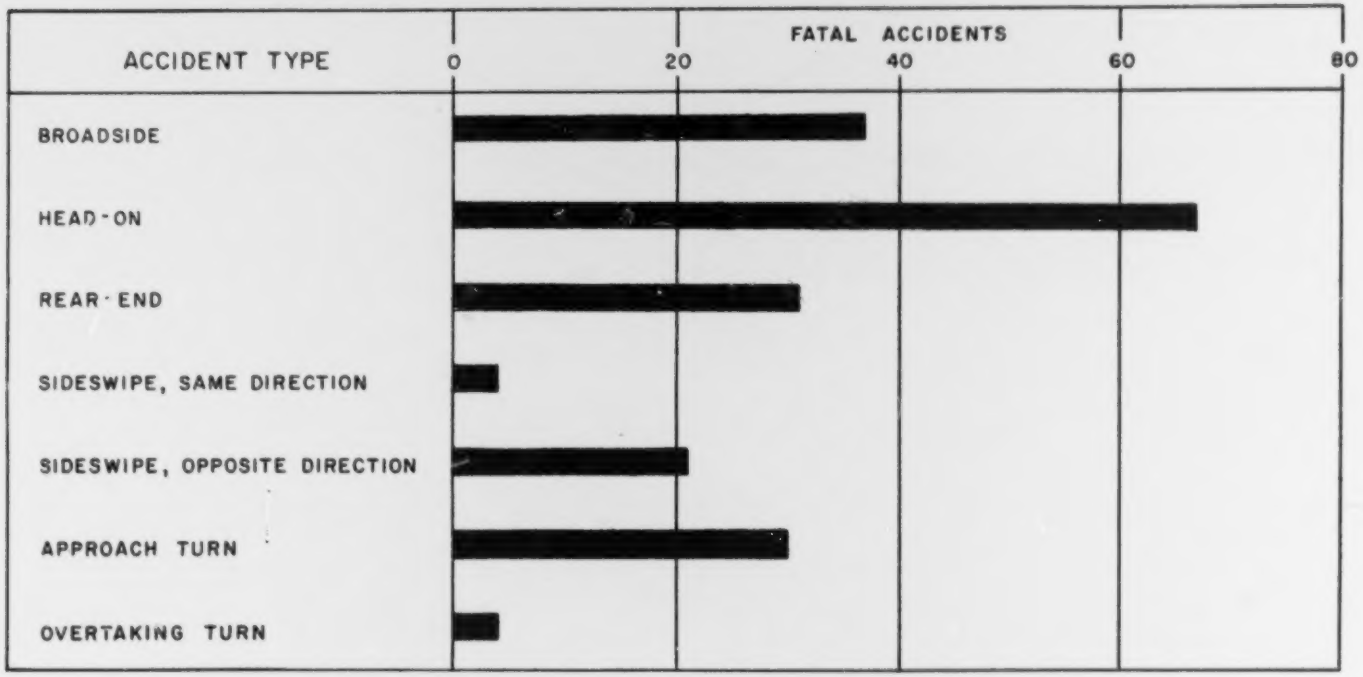
MOTOR VEHICLE TRAFFIC ACCIDENTS BY TYPE

1978

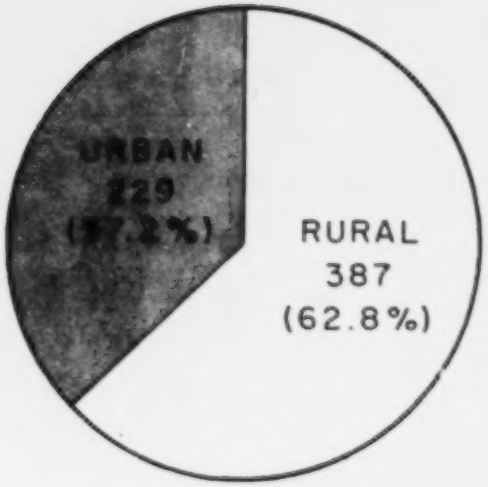


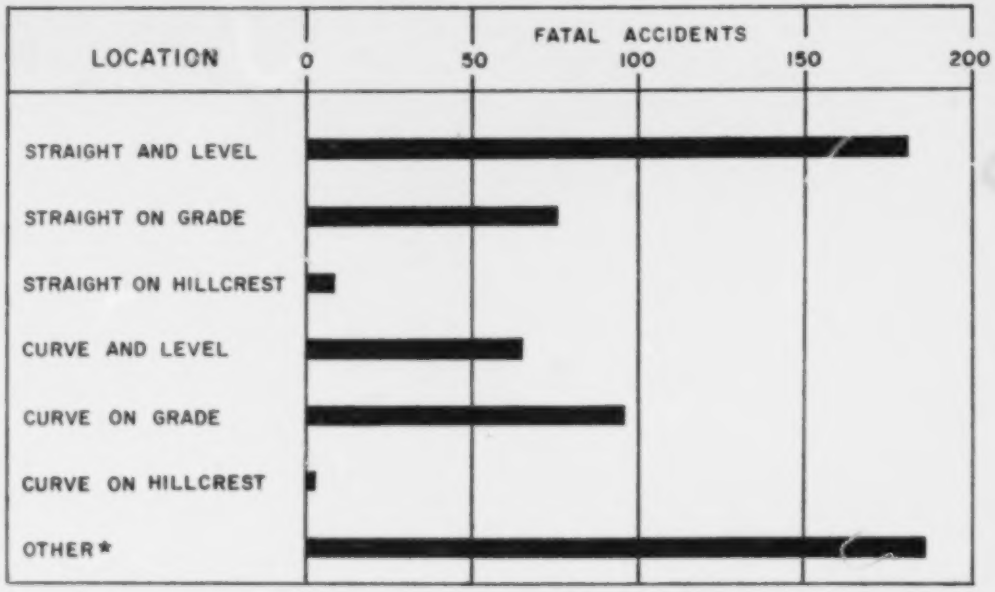
VEHICLE COLLISION FATAL ACCIDENTS BY TYPE

1978



LOCATION DESCRIPTION 1978





*Includes intersections, driveways, railroad crossings, bridges, etc.

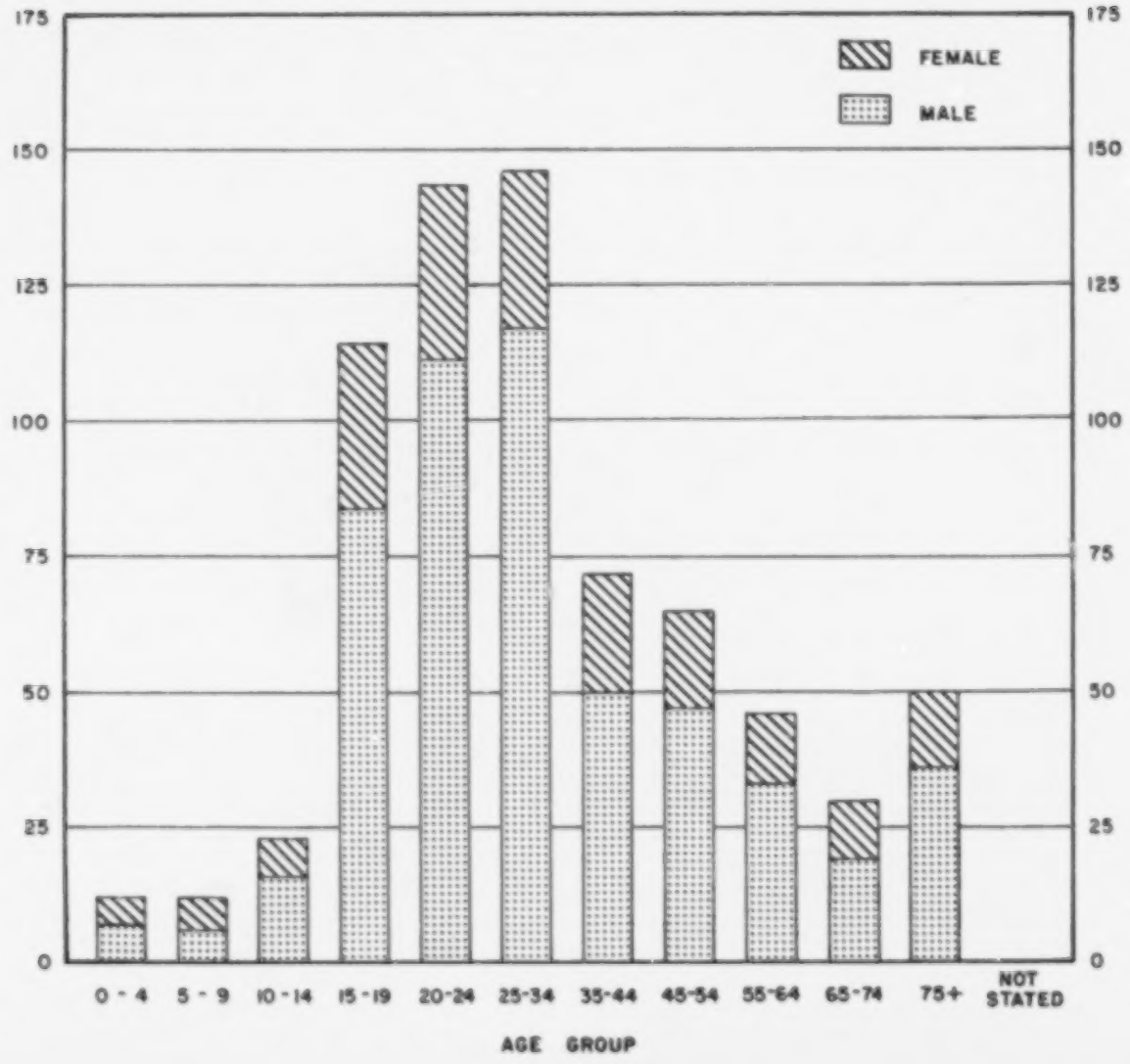
FATALITIES BY AGE AND SEX

1978

Age	Number of Persons Killed								
	Total Killed			Pedestrians			Bicyclists		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0 to 4	12	7	5	3	1	2	-	-	-
5 to 9	12	6	6	4	2	2	1	1	-
10 to 14	23	16	7	5	4	1	3	3	-
15 to 19	114	84	30	16	14	2	3	3	-
20 to 24	143	111	32	7	6	1	1	1	-
25 to 34	146	117	29	11	9	2	1	-	1
35 to 44	72	50	22	4	2	2	-	-	-
45 to 54	65	47	18	5	3	2	1	1	-
55 to 64	46	33	13	6	3	3	1	1	-
65 to 74	30	19	11	10	6	4	-	-	-
75 & Older	50	36	14	17	13	4	-	-	-
Not Stated	-	-	-	-	-	-	-	-	-
Totals	713	526	187	88	63	25	11	10	1

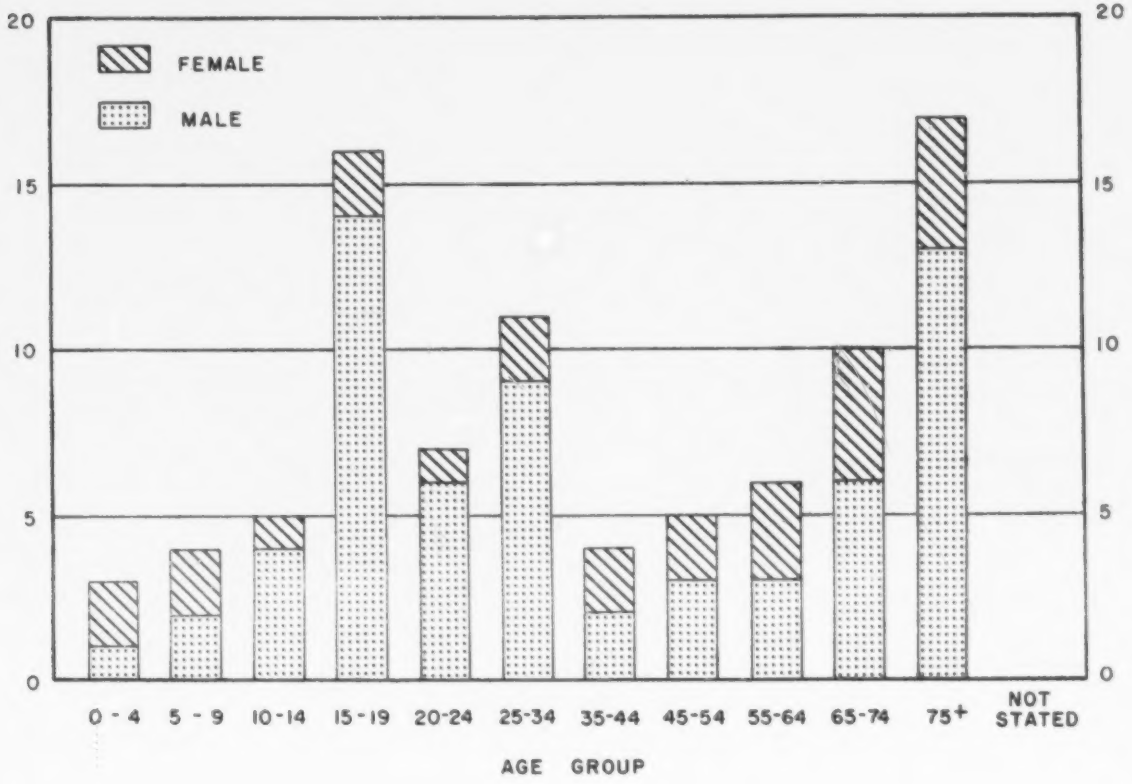
FATALITIES BY AGE AND SEX

1978



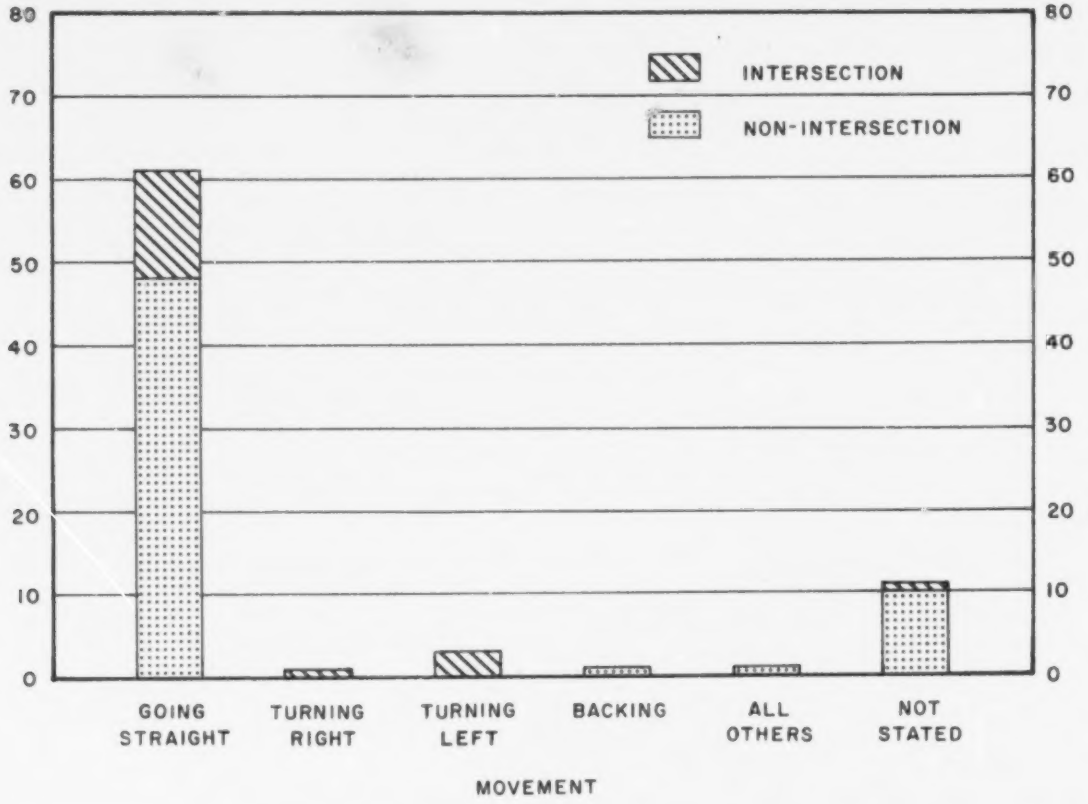
PEDESTRIAN FATALITIES BY AGE AND SEX

1978



FATAL PEDESTRIAN ACCIDENTS BY VEHICLE MOVEMENT

1978



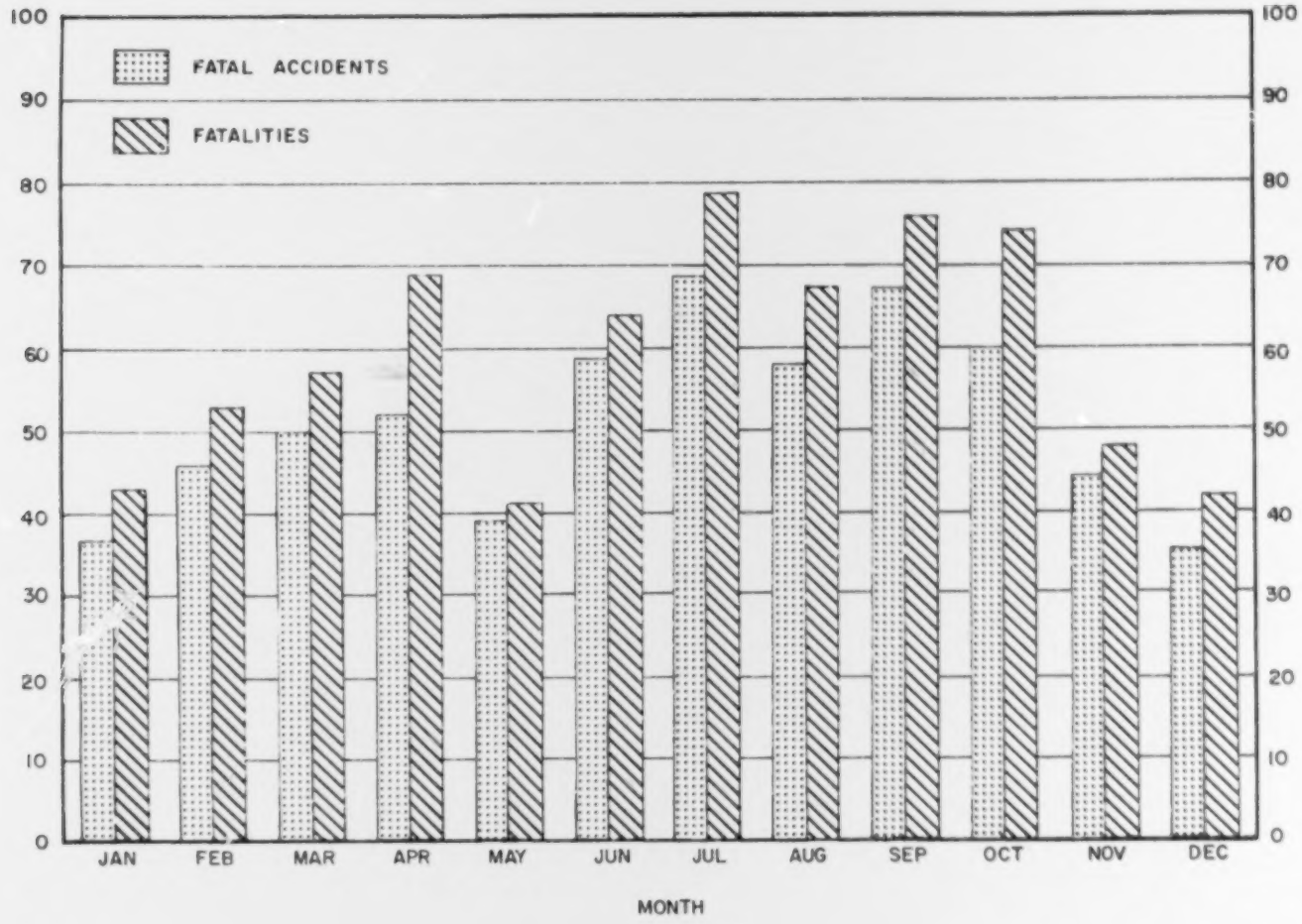
FATAL ACCIDENTS AND FATALITIES BY HIGHWAY SYSTEM

1977 AND 1978

ROAD SYSTEM	YEAR	ALL SYSTEMS	INTER-STATES	STATE HIGHWAYS	COUNTY ROADS	CITY STREETS
NUMBER OF FATAL ACCIDENTS	1977	620	70	340	123	87
	1978	616	103	310	105	98
NUMBER OF FATALITIES	1977	705	88	382	138	97
	1978	713	125	360	119	109
VEHICLE-MILES OF TRAVEL (MILLIONS)	1977	18,551	4,298	6,614	1,857	5,782
	1978	19,817	4,591	7,065	1,984	6,177
FATAL ACCIDENT RATE (PER 100 MILLION VEH-MILES)	1977	3.3	1.6	5.1	6.6	1.5
	1978	3.1	2.2	4.4	5.3	1.6
FATALITY RATE (PER 100 MILLION VEH-MILES)	1977	3.8	2.0	5.8	7.4	1.7
	1978	3.6	2.7	5.1	6.0	1.8

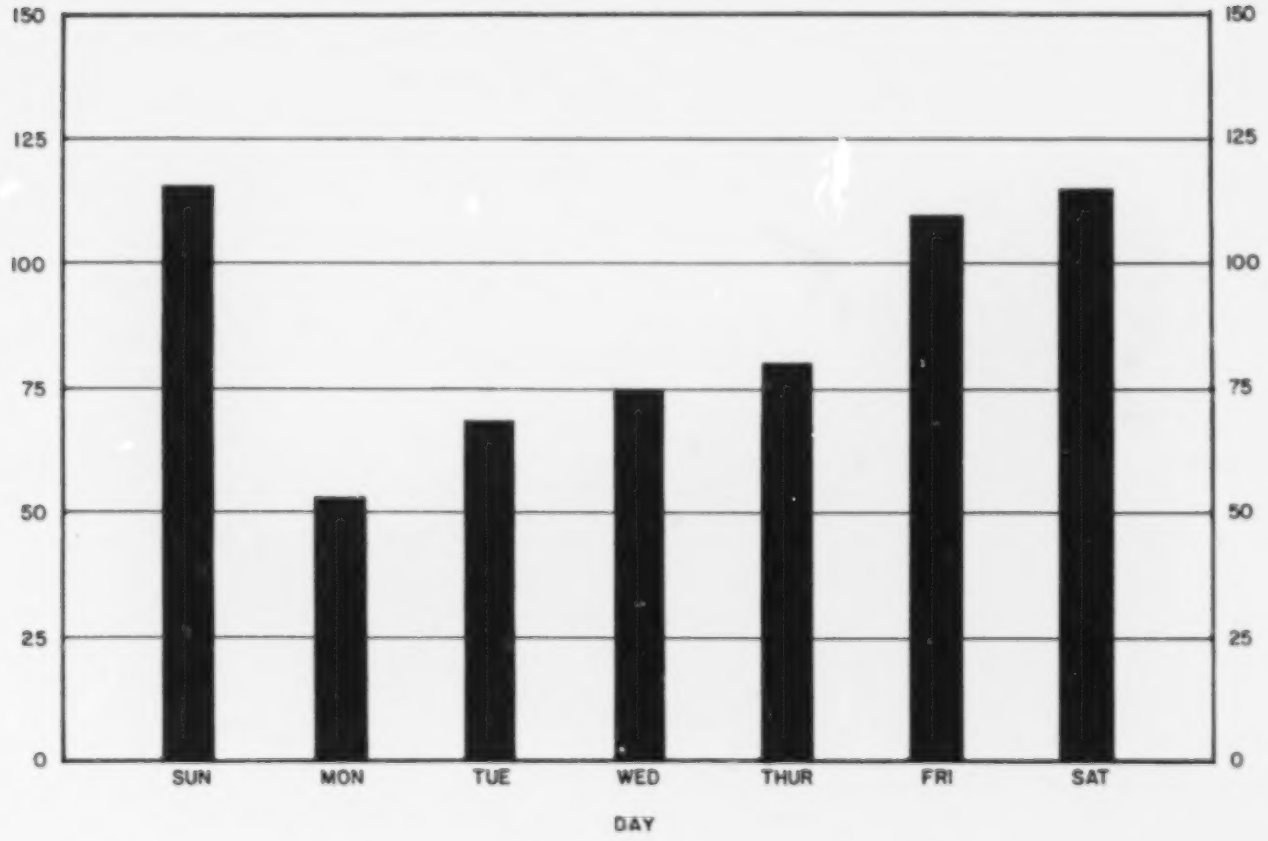
FATAL ACCIDENTS AND FATALITIES BY MONTH

1978



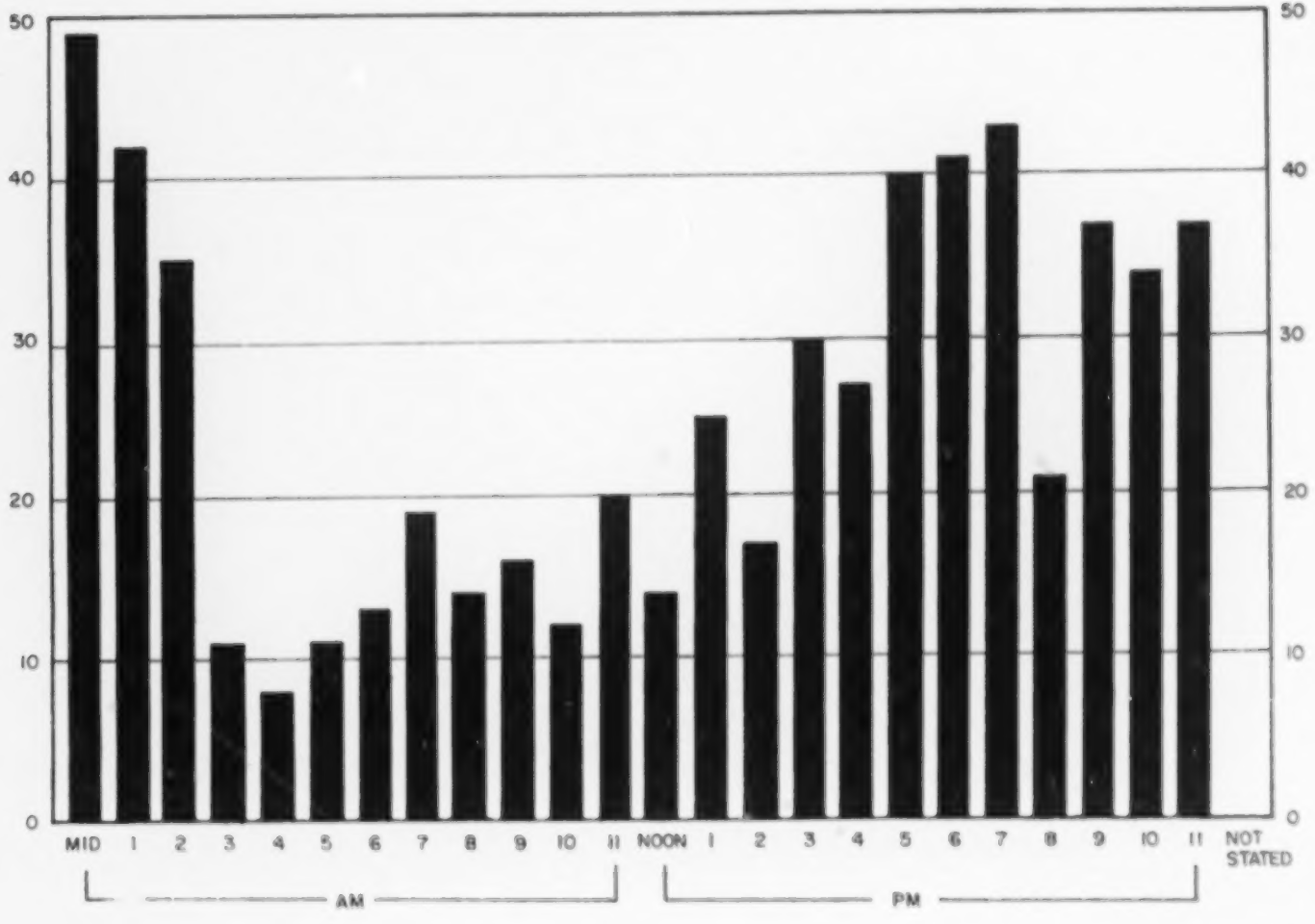
FATAL ACCIDENTS BY DAY OF WEEK

1978



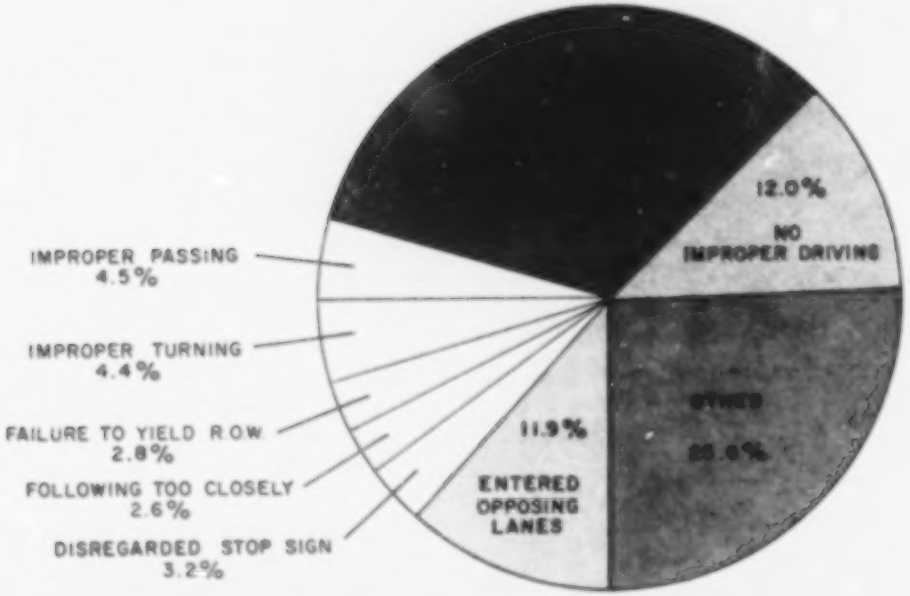
FATAL ACCIDENTS BY TIME OF DAY

1978



IMPROPER DRIVER ACTION IN FATAL ACCIDENTS

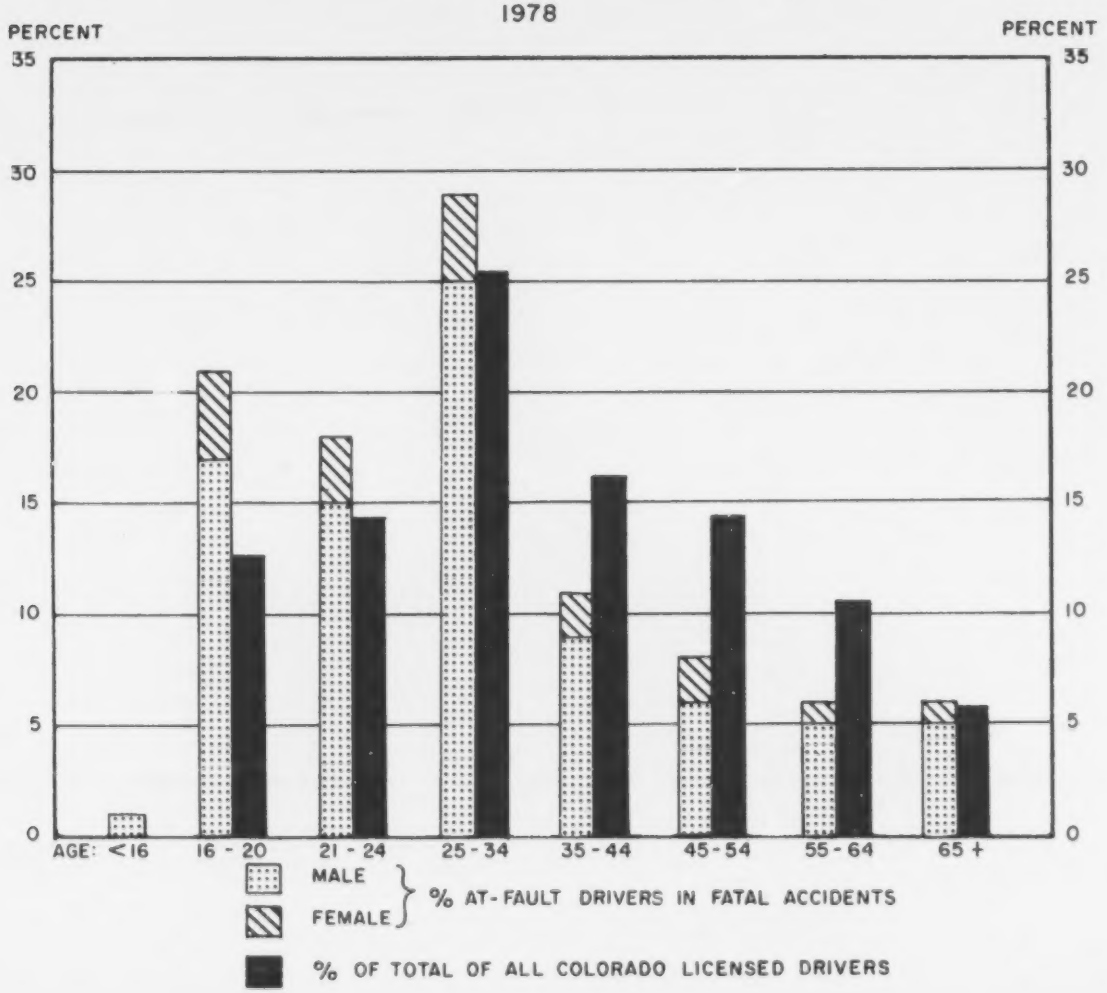
1978



In 304 (49.4%) of the 616 fatal accidents, drivers and/or pedestrians with a blood-alcohol content of .05% or higher were noted. Exceeding the speed limit was a factor in 287 (46.6%) of the fatal accidents, and 33 (5.4%) of the drivers were "apparently asleep."

AT - FAULT DRIVERS IN FATAL ACCIDENTS

1978



SEAT BELTS

The 616 fatal motor vehicle traffic accidents that occurred in 1978 involved 869 vehicles occupied by 1540 persons. Data pertaining to seat belt (or seat belt and shoulder harness) usage by the occupants of the 697 passenger cars and pickup trucks is tabulated below. Data from fatal accidents involving pedestrians or bicyclists, and for vehicles other than passenger cars and pickup trucks, have been omitted:

	Using Belts a/o Harnesses	Not Using Belts a/o Harnesses	Totals
Persons ejected and killed	2 (50%)	174 (69%)	176 (69%)
Persons ejected and injured	2 (50%)	75 (30%)	77 (30%)
Persons ejected and not injured	0	3 (1%)	3 (1%)
Total persons ejected	4 (100%)	252 (100%)	256 (100%)
Persons not ejected but killed	29 (32%)	284 (34%)	313 (34%)
Persons not ejected but injured	34 (38%)	409 (49%)	443 (48%)
Persons not ejected and not injured	27 (30%)	143 (17%)	170 (18%)
Total persons not ejected	90 (100%)	836 (100%)	926 (100%)
Total occupants of passenger cars and pickup trucks	94 (8.0% of the 1182)	1088 (92.0% of the 1182)	1182 (100%)

Persons using belts a/o harnesses who survived 63 (67% of the 94)
Persons not using belts a/o harnesses who survived 630 (58% of the 1088)

ROADSIDE APPURTENANCES

In 165 (40%) of the 413 fatal motor vehicle traffic accidents which occurred on State Highways during 1978 vehicles collided with roadside objects. In these collision-type accidents 184 persons died. A listing of the appurtenances struck is shown below, arranged by location and type:

	ON LEFT		IN MEDIAN		ON RIGHT	
STRUCTURAL AND PROTECTIVE DEVICES:	Bridge abutment	- 3	Bridge abutment	- 1	Bridge abutment	- 1
	Bridge railing	- 5	Median barrier	-11	Bridge railing	- 7
	Guardrail	- 9	Guardrail	- 3	Guardrail	-19
	Under crossing column	- 2	Under crossing column	- 1	Concrete column or pier	- 1
					Concrete headwall	- 1
					Culvert	- 5
					Rock wall	- 1
TRAFFIC CONTROL DEVICES:	Delineator post	- 7	Delineator post	- 1	Delineator post	-19
	Highway sign	- 4	Highway sign	- 1	Highway sign	- 4
					Traffic signal pole	- 2
ON TERRAIN:	Boulder	- 4	Embankment	- 2	Boulder	- 8
	Culvert	- 1			Embankment	- 8
	Ditch	- 1			Irrigation ditch	- 2
	Embankment	- 8			Tree	-12
	Tree	-10				
MISCELLANEOUS:	Curb	- 4	Curb	- 6	Curb	- 8
	Fence	-15	Fence	- 1	Fence	-19
	Utility pole	- 7			Light pole	- 4
	Wooden post	- 1			Utility pole	- 3

FATAL ACCIDENTS AND FATALITIES BY COUNTY - 1978

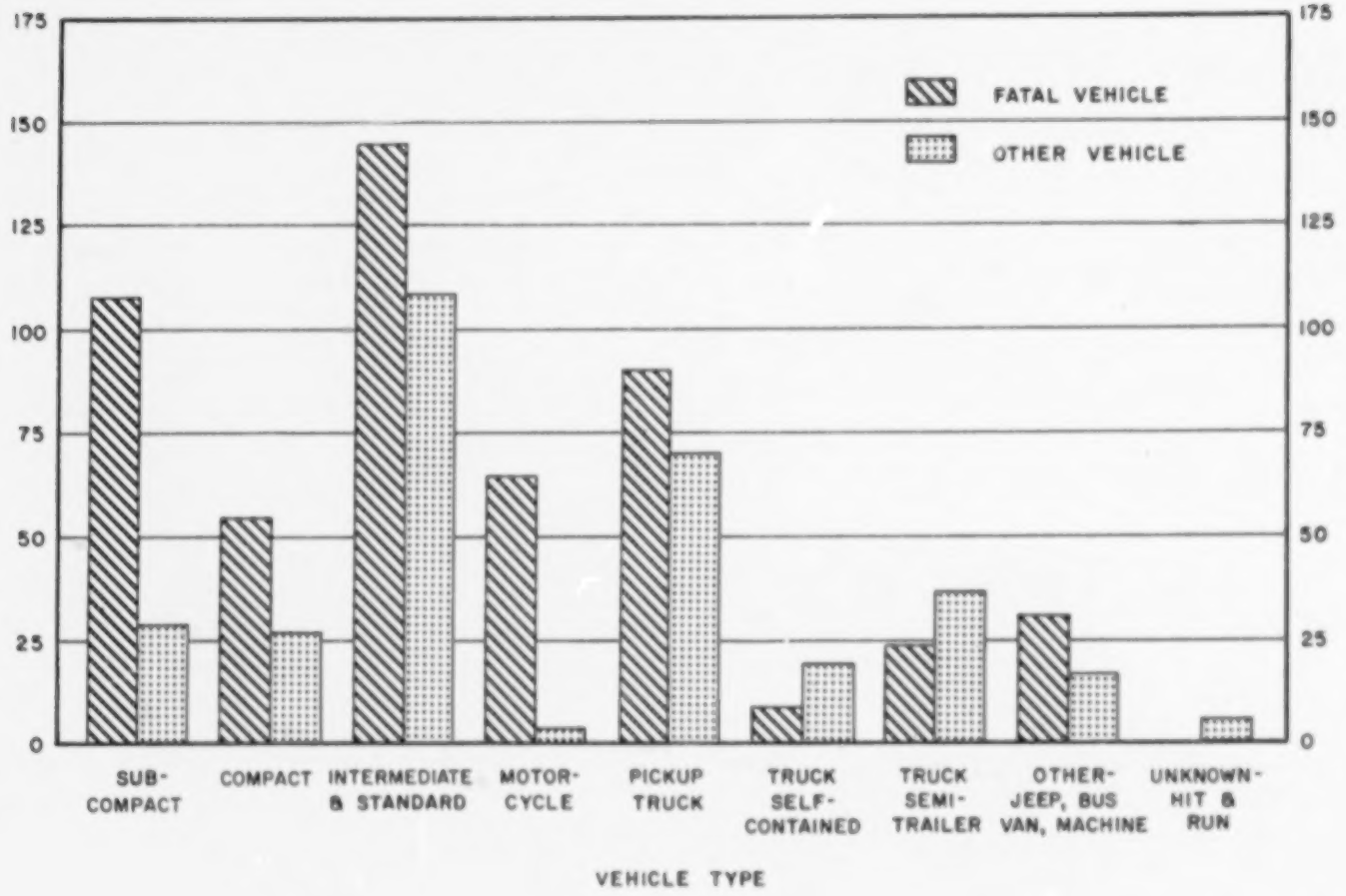
County	Fatal Accidents	Fatalities	County	Fatal Accidents	Fatalities
Adams	32	42	Lake	2	2
Alamosa	4	4	La Plata	12	15
Arapahoe	23	27	Larimer	29	36
Archuleta	0	0	Las Animas	5	5
Baca	4	5	Lincoln	3	7
Bent	3	4	Logan	9	14
Boulder	35	41	Mesa	19	20
Chaffee	8	11	Mineral	1	1
Cheyenne	5	5	Moffat	5	6
Clear Creek	7	9	Montezuma	5	5
Conejos	3	4	Montrose	10	12
Costilla	1	1	Morgan	5	5
Crowley	0	0	Otero	6	8
Custer	1	1	Ouray	2	2
Delta	7	9	Park	1	2
Denver	65	72	Phillips	0	0
Dolores	0	0	Pitkin	7	8
Douglas	15	17	Prowers	5	6
Eagle	13	14	Pueblo	19	22
Elbert	2	2	Rio Blanco	3	3
El Paso	57	63	Rio Grande	0	0
Fremont	9	12	Routt	4	4
Garfield	13	14	Saguache	2	2
Gilpin	4	4	San Juan	1	3
Grand	9	12	San Miguel	2	2
Gunnison	4	4	Sedgwick	2	2
Hinsdale	0	0	Summit	17	20
Huerfano	5	5	Teller	2	2
Jackson	2	2	Washington	1	1
Jefferson	61	66	Weld	37	40
Kiowa	1	1	Yuma	5	5
Kit Carson	2	2	Totals	616	713

1978 FATAL ACCIDENTS OCCURRING WITHIN INCORPORATED AREAS

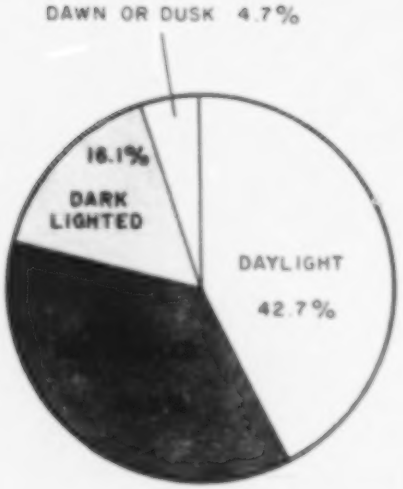
City	Fatal Accidents
Alamosa	1
Arvada	4
Ault	1
Aurora	10
Black Hawk	1
Boulder	5
Broomfield	2
Brush	1
Canon City	1
Central City	1
Colorado Springs	24
Commerce City	6
Cortez	1
Denver	65
Durango	1
Englewood	2
Evans	1
Fort Collins	4
Fountain	1
Fruita	1
Glenwood Springs	1
Grand Junction	3
Greeley	4
Greenwood Village	1
Hotchkiss	1
Iliff	1
La Junta	1
Lakewood	12
Lamar	1
La Salle	1
Littleton	6
Longmont	1
Louisville	1
Loveland	3
Manitou Springs	1
Mountain View	1
Northglenn	1
Pueblo	11
Sheridan	1
Silver Plume	1
Silverthorne	1
Thornton	4
Vail	1
Westminster	2
Wheat Ridge	6
Total	200

VEHICLE TYPES IN FATAL ACCIDENTS

1978

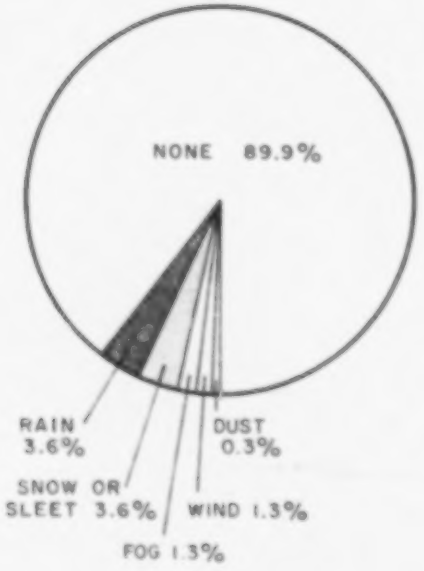


LIGHT CONDITIONS

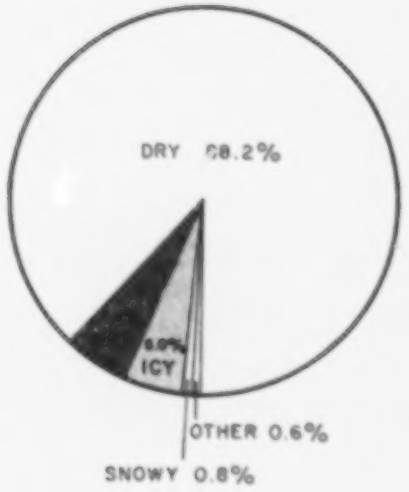


ADVERSE WEATHER CONDITIONS

1978



ROAD SURFACE CONDITIONS



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MISCELLANEOUS FATAL ACCIDENT INFORMATION - 1978

1. Accidents occurring

a.	on road curves	186	(30% of the 616)
b.	on grades	196	(32% " " ")
c.	on curves and grades	96	(16% " " ")
d.	at intersections	113	(18% " " ")
e.	during periods of adverse road surface conditions	73	(12% " " ")
f.	during periods of adverse weather conditions	62	(10% " " ")
g.	during hours of darkness	323	(52% " " ")
h.	on State Highways in mountainous terrain	109	(26% of the 413)

2.	Accidents in which drivers with out-of-state licenses were at fault	120	(20% of the 616)
3.	Accidents involving vehicles traveling in excess of 55 MPH	202	(33% " " ")
4.	Accidents in 55 MPH Speed Zones	250	(41% " " ")
5.	Accidents involving vehicles in excess of 55 MPH in 55 MPH Speed Zones	107	(43% of the 250)